**PLANT AND SOIL**

Contents Volume 267, Nos. 1–2 December 2004

**Evidence for copper binding by extracellular root exudates of tall fescue but not perennial ryegrass infected with *Neotyphodium* spp. endophytes**
D.P. Malinowski, H. Zuo, D.P. Belesky and G.A. Alloush 1–12

**Impact of tillage on the incidence of *Fusarium* spp. in soil**
S. Steinkellner and I. Langer 13–22

**Spatial and temporal variation of seepage water chemistry after femel and small scale clear-cutting in a N-saturated Norway spruce stand**
C. Huber, W. Weis, M. Baumgarten and A. Göttlein 23–40

**Changes in the concentration of phenolic compounds and exudation induced by phosphate deficiency in bean plants (*Phaseolus vulgaris* L.)**
I.M. Juszczuk, A. Wiktorowska, E. Malusá and A.M. Rychter 41–49

**Chemical reduction causing land degration. I Overview**
W.K. Gardner, J.D. Fawcett, R.W. Fitzpatrick and R.M. Norton 51–59

**Wood-ash recycling affects forest soil and tree fine-root chemistry and reverses soil acidification**
I. Brunner, S. Zimmermann, A. Zingg and P. Blaser 61–71

***Zea mays* L. amylacea from the Lluta Valley (Arica-Chile) tolerates salinity stress when high levels of boron are available**
E.I. Bastías, M.B. González-Moro and C. González-Murua 73–84

**Chemical reduction causing land degradation. II Detailed observations at a discharge site in the Eastern Dundas Tablelands, Victoria, Australia**
W.K. Gardner, J.D. Fawcett, R.W. Fitzpatrick, R.M. Norton and M. Trethowan 85–95

**Boron and calcium increase *Pisum sativum* seed germination and seedling development under salt stress**
I. Bonilla, A. El-Hamdaoui and L. Bolaños 97–107

**Plant cation-anion balance as affected by the ionic composition of the growing medium**
D. Curtin and G. Wen 109–115

**Short-term nitrous oxide emissions from pasture soil as influenced by urea level and soil nitrate**
S.O. Petersen, S. Stamatiadis and C. Christofides 117–127

**How does the nature of living and dead roots affect the residence time of carbon in the root litter continuum?**
E. Personeni and P. Loiseau 129–141

**Effects of inoculation with plant growth promoting rhizobacteria (PGPRs) and *Sinorhizobium fredii* on biological nitrogen fixation, nodulation and growth of *Glycine max* cv. Osumi**
J.A. Lucas García, A. Probanza, B. Ramos, J. Barriuso and F.J. Gutierrez Mañero 143–153

**Effects of recycled bentonite addition on soil properties, plant growth and nutrient uptake in a tropical sandy soil**
J. Croker, R. Poss, C. Hartmann and S. Bhuthorndharaj **155–163**

**Genotypic variations in carbon isotope discrimination, transpiration efficiency, and biomass production in rice as affected by soil water conditions and N**
M. Kondo, P.P. Pablico, D.V. Aragones and R. Agbisit **165–177**

**The growth and P acquisition of *Eucalyptus regnans* F. Muell. seedlings in air-dried and undried forest soil in relation to seedling age and ectomycorrhizal infection**
T.M. Launonen, D.H. Ashton, K.J. Kelliher and P.J. Keane **179–189**

**Rare earth elements in soil and plant systems – A review**
G. Tyler **191–206**

**Characterization of genetic diversity of *Frankia* strains in nodules of *Alnus nepalensis* (D. Don) from the Hengduan Mountains on the basis of PCR-RFLP analysis of the *nifD-nifK* IGS**
Y.M. Dai, X.Y. He, C.G. Zhang and Z.Z. Zhang **207–212**

**Fungal ectomycorrhizal community and drought affect root hydraulic properties and soil adherence to roots of *Pinus pinaster* seedlings**
M.-B. Bogeat-Triboulot, F. Bartoli, J. Garbaye, R. Marmeisse and D. Tagu **213–223**

**A method to separate plant roots from soil and analyze root surface area**
J.G. Benjamin and D.C. Nielsen **225–234**

**Bacterial inoculation of maize affects carbon allocation to roots and carbon turnover in the rhizosphere**
J. Schulz and G. Pöschel **235–241**

**The dynamics of neutral sugars in the rhizosphere of wheat. An approach by $^{13}C$ pulse-labelling and GC/C/IRMS**
D. Derrien, C. Marol and J. Balesdent **243–253**

**Environmental and nutritional responses of a *Pinus radiata* plantation to biosolids application**
H. Wang, G.N. Magesan, M.O. Kimberley, T.W. Payn, P.J. Wilks and C.R. Fisher **255–262**

**Comparison of continuously recorded plant-based water stress indicators for young lemon trees**
M.F. Ortuño, J.J. Alarcón, E. Nicolás and A. Torrecillas **263–270**

**Zinc fertilization and water stress affects plant water relations, stomatal conductance and osmotic adjustment in chickpea (*Cicer arientinum* L.)**
H.R. Khan, G.K. McDonald and Z. Rengel **271–284**

**Immobilisation, remineralisation and residual effects in subsequent crops of dairy cattle slurry nitrogen compared to mineral fertiliser nitrogen**
P. Sørensen **285–296**

**Seasonal dynamics in the concentrations of macronutrients and organic constituents in green and senesced leaves of three agroforestry species in southern Ethiopia**
T. Teklay **297–307**

**Effect of soil mechanical impedance on root growth of two rice varieties under field drought stress**
J.E. Cairns, A. Audebert, J. Townend, A.H. Price and C.E. Mullins **309–318**

**Growth responses of seminal roots of wheat seedlings to a reduction in the water potential of vermiculite**
M. Akmal and T. Hirasawa **319–328**

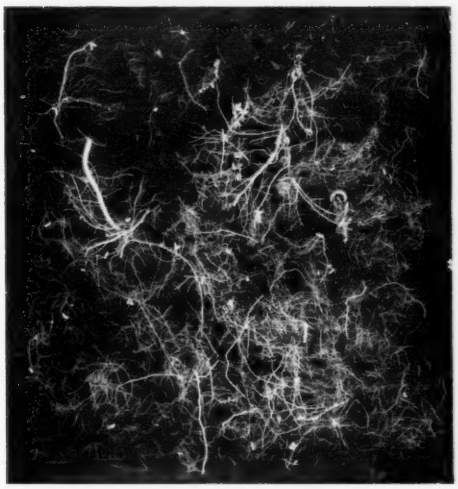
**Modelling the impact of microbial grazers on soluble rhizodeposit turnover**
B. Foereid and J.M. Yearsley **329–342**

**Rhizospheric exudation of *Eriophorum vaginatum* L. – Potential link to methanogenesis**
S. Saarnio, L. Wittenmayer and W. Merbach **343–355**

**Is tamarisk allelopathic?**
P. Lesica and T.H. DeLuca **357–365**

**Increasing drought decreases phosphorus availability in an evergreen Mediterranean forest**
J. Sardans and J. Peñuelas **367–377**

Electronic journals at
KluwerOnline
WWW.KLUWERONLINE.NL
Contact your librarian for more information



**Cover Photo:** Digital image of cleaned profi pea root segments and nodules, washed from the 0 to 22 cm layer of a Weld soil, Akron, Colorado, 2000.
Photographer – Joseph Benjamin.
*Plant and Soil* Vol. 267, pp. 225–234.